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MICHAEL BEST & FRIEDRICH, LLP			CAPUTO, LISA M	
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MILWAUKEE, WI 53202			PAPER NUMBER	

2876

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,047

Applicant(s)

LU ET AL.

Examiner

Lisa M. Caputo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,11-20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,11-20 and 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Appeal Brief

1. Receipt is acknowledged of the appeal brief filed 20 May 2005. Prosecution on the merits of this application is reopened after careful review and reconsideration of the case and after consultation with the supervisor. The same references are used in the rejection, however, the motivation to combine the references has been elaborated upon.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle (U.S. Patent No. 5,497,140) in view of Conwell et al. (U.S. Patent Application Publication 2002/0135481, from hereinafter "Conwell").

Tuttle teaches an electrically powered postage stamp operative with radio frequency communication. Further, the electrically powered postage stamp and an electrically powered mailing label, each of which include, in combination, an integrated circuit chip having an RF transceiver constructed therein; a thin flat battery cell connected to the IC chip for providing power thereto; and a thin film RF antenna connected to the IC chip for transmitting data to and from the IC chip. All of the above components are connected in a very thin array and mounted between opposing major facing surfaces (as recited in claims 1 and 6) of either a postage stamp or a larger mailing or shipping label in a substantially two dimensional planar configuration. These components are operative to store data in the IC chip memory, which data includes such things as the destination address, return address, and descriptions of the contents of the article being mailed or shipped. These components are further operative in a novel system combination to transmit the stored data to an interrogating party upon receipt of RF interrogation signals transmitted to the stamp or label, or to receive data from same (see col 2, lines 25-44).

Regarding claim 1, Tuttle teaches a trackable postage stamp that comprises a first surface and a second surface opposite the first surface and adapted to adhere to a piece of mail, and an active RFID tracking device that includes stamp identification information (see Figures 1-2, col 2, lines 25-44, col 3 line 44 to col 4 line 30).

Regarding claim 1, Tuttle fails to teach that the tracking device is passive.

Conwell teaches a tamper evident smart label with an RF transponder. Conwell discloses that as shown in FIG. 1, one embodiment of the invention uses a label or tag material M1 made from a self-destructible material such as the 3M 7900, 7930 or 7610 ScotchMark Destructible White Vinyl or similar tamper-indicating materials designed to fracture or break apart when peeled up from a substrate 3. This label stock is imprintable on demand with thermal transfer ribbon ink, or it can be preprinted on a press using flexographic, letterpress, offset, rotogravure, screen, or other technology. This label with adhesive 1 and release liner contains an embedded passive RFID transponder tag inserted such that it is sandwiched between the adhesive and the release liner. After printing, the label is removed from the release liner, which protects the label during printing and before application; the RF transponder remains attached to the adhesive 1 and is applied with the label to a substrate 3 (see Figure 1, paragraph 15). Hence, Conwell teaches the use of a passive RFID transponder tag that is embedded in a label which includes an adhesive.

In view of the teaching of Conwell, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a passive tracking device as disclosed by Conwell in addition to an active tracking device because a passive tracking device is able to generate its own power without the use of an external battery or source. This is favorable because if the power source that is supplying the active device malfunctions, the passive device can be employed since it does not depend on an external source for power. In addition, a passive tracking device has less hardware

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components, hence the transponder itself can be made smaller, which is favorable in the case of a postage stamp.

Regarding claim 3, Tuttle teaches that the tracking device is an RFID device (see Figure 1, col 3, lines 44-66).

Regarding claims 4-5 and 7, Tuttle discloses that the stamp ID information includes unique encrypted data corresponding to identification number, the sender's name, point of origin, weight, size, route, destination, and the like and that the encrypted data are combined to at least partially yield the stamp ID information (see col 3, lines 61-64).

Regarding claim 6, the tracking device is coupled to the second surface (see Figures 1-2, col 3 line 44 to col 4 line 30).

4. Claims 11-17, 19, 22, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle (U.S. Patent No. 5,497,140) in view of Levasseur et al. (U.S. Patent No. 4,008,792, from hereinafter "Levasseur"), Fite et al. (U.S. Patent No. 6,467,684, from hereinafter "Fite"), and Conwell et al. (U.S. Patent Application Publication 2002/0135481, from hereinafter "Conwell").

Regarding claims 11 and 19, Tuttle teaches an electrically powered postage stamp operative with radio frequency communication. Further, the electrically powered postage stamp and an electrically powered mailing label, each of which include, in combination, an integrated circuit chip having an RF transceiver constructed therein; a thin flat battery cell connected to the IC chip for providing power thereto; and a thin film RF antenna connected to the IC chip for transmitting data to and from the IC chip. All of

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the above components are connected in a very thin array and mounted between opposing major facing surfaces (as recited in claims 1 and 6) of either a postage stamp or a larger mailing or shipping label in a substantially two dimensional planar configuration. These components are operative to store data in the IC chip memory, which data includes such things as the destination address, return address, and descriptions of the contents of the article being mailed or shipped. These components are further operative in a novel system combination to transmit the stored data to an interrogating party upon receipt of RF interrogation signals transmitted to the stamp or label, or to receive data from same (see col 2, lines 25-44).

Regarding claims 11 and 19, Tuttle fails to teach a postage stamp dispensing system and method that comprises a stamp dispenser to contain and dispense the stamps that have the tracking device.

Levasseur teaches vend control circuits capable of vending different quantities at different prices. Levasseur teaches that each pulse of the vendor control system 160 produces a separate vend operation, for example, each pulse can be used to dispense a postage stamp of some other item or service (see Figures 3-4, col 9, lines 10-27). Hence, Levasseur teaches that stamps are able to be vended.

In view of the teaching of Levasseur it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a vending machine to dispense stamps because this is an efficient and a convenient way for consumers to be able to purchase stamps when a conventional store is closed. Since the RFID

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components are embedded within the actual stamp, it is possible and feasible for them to be vended like any other item.

Further regarding claims 11 and 19, Tuttle as modified by Levasseur fails to teach a reader that is operatively associated with the stamp dispenser to read the stamp ID information when the relative position between the stamp and the reader changes and a database that is operable to store the read stamp ID information.

Fite teaches a pre-paid card system for purchasing products or services. Fite discloses in FIG. 1 reference numeral 10 generally indicates a prepaid card system according to the invention. The system 10 comprises a host database 12, a card vendor terminal 14, a merchant station 16 and a customer internet access terminal 18, as well as cash cards 20 for use with the system 10. One such card 20 is illustrated in FIG. 2. The cards 20 are typically of plastic and each card 20 is issued for a specific amount which is displayed on the face of the card 20, e.g. for the following denominations \$1, \$2, \$5, \$10, \$20, \$50, \$100 (FIG. 3). Each card 20 further has a unique identity number which is printed on the rear of the card 20, as indicated at 22 in FIG. 2 and covered with a customer or user removable scratch off material, such as an opaque tape 24. Each card 20 is further provided with a magnetic strip 26, which is a read only memory containing the same identity number 22. The card vendor terminal 14 incorporates a computer which is linked through the Internet or other communication means to the host database 12. The terminal 14 has a card reader for reading the memory on the card 20, such as a swipe slot, for receiving the card 20 and reading the card identification number from the magnetic strip 26. The terminal 14 also includes a keypad for entering

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various alphanumeric or other control characters, as well as a display and modem, if necessary, for connection to the host database 12. A plurality of vendor terminals 14 are provided at various outlet locations conveniently situated for customers or users of the system to purchase the cards 20. At the time of purchase, the customer will select one or more of the cards 20 with the desired denominations. The cards 20 are inactive prior to sale and are activated when read by the card reader (FIG. 4). At this time, the terminal 14 conveys information to the host database 12 that the particular card 20 is now active. Effectively, the card 20 is now comparable to a bank note in the hands of a customer (see Figures 1 and 3-4, col 2 line 60 to col 3 line 30). Hence, Fite teaches a reader that is operatively associated with the pre-paid card dispenser to read the pre-paid card ID information when the relative position between the pre-paid card and the reader changes (i.e. when the card is purchased, activated, and removed from the vending machine), and a database operable to store the read card information.

In view of the teaching of Fite, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a reader to be able to read the identification information and to be able to store it in a database because it is favorable to be able to track an object that has been purchased by a consumer to ensure correct handling and operation. In addition, it is appropriate to modify Tuttle/Levasseur with Fite because Tuttle/Levasseur teach a vending machine and system for vending stamps to be tracked, and Fite teaches a vending machine and system for vending pre-paid card that are also tracked, hence would have been obvious to one of ordinary skill in the

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art at the time the invention was made to vend stamps and pre-paid cards in the same manner.

Further regarding claims 11 and 19, Tuttle/Levasseur/Fite fails to teach that the tracking device is passive.

Conwell teaches a tamper evident smart label with an RF transponder. Conwell discloses that as shown in FIG. 1, one embodiment of the invention uses a label or tag material M1 made from a self-destructible material such as the 3M 7900, 7930 or 7610 ScotchMark Destructible White Vinyl or similar tamper-indicating materials designed to fracture or break apart when peeled up from a substrate 3. This label stock is imprintable on demand with thermal transfer ribbon ink, or it can be preprinted on a press using flexographic, letterpress, offset, rotogravure, screen, or other technology. This label with adhesive 1 and release liner contains an embedded passive RFID transponder tag inserted such that it is sandwiched between the adhesive and the release liner. After printing, the label is removed from the release liner, which protects the label during printing and before application; the RF transponder remains attached to the adhesive 1 and is applied with the label to a substrate 3 (see Figure 1, paragraph 15). Hence, Conwell teaches the use of a passive RFID transponder tag that is embedded in a label which includes an adhesive.

In view of the teaching of Conwell, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a passive tracking device as disclosed by Conwell in addition to an active tracking device because a passive tracking device is able to generate its own power without the use of an external battery or

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source. This is favorable because if the power source that is supplying the active device malfunctions, the passive device can be employed since it does not depend on an external source for power. In addition, a passive tracking device has less hardware components, hence the transponder itself can be made smaller, which is favorable in the case of a postage stamp.

Regarding claims 12-13 and 22, Tuttle discloses that the stamp ID information includes unique encrypted data corresponding to identification number, the sender's name, point of origin, weight, size, route, destination, and the like and that the encrypted data are combined to at least partially yield the stamp ID information (see col 3, lines 61-64).

Regarding claim 14, Tuttle/Levasseur/Fite/Conwell fails to teach that the encrypted data that makes up the stamp ID information is stored as separate values in the database.

However, Fite teaches that each card 20 has a unique identity number and information, and that the database 12 retains information about the particular card 20 that is now activated (see Figures 1 and 3-4, col 3, lines 1-29). Hence, Fite teaches that the database stores information separately about each particular card (i.e. stamp).

Hence, in view of the teaching of Fite, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a unique, individual database entry for each different piece of information so that accurate, up-to-date information can be obtained and does not get misconstrued and jumbled within a large database file.

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Regarding claim 15, Tuttle as modified by Levasseur/Fite/Conwell fails to teach that the dispenser is a vending machine wherein the reader is a part of the vending machine.

However, Fite teaches a system that employs vendor terminals and a reader that is part of the vendor terminal to dispense products (see Figures 1 and 3-4, col 2 line 60 to col 3 line 30).

Hence, in view of the teaching of Fite, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a vending machine with a reader because a vending machine is well known in the art to be an efficient way to dispense products to consumers when a store/sales associate is not available.

Regarding claims 16-17 and 26-28, Tuttle as modified by Levasseur/Fite/Conwell fails to teach that the stamps are arranged in a book and the book includes book identification data which is able to be tracked.

However, Fite teaches that each card 20 has a unique identity number and information, and that the database 12 retains information about the particular card 20 that is now activated (see Figures 1 and 3-4, col 2 line 60 to col 3 line 30). The cards' unique identity number can be applied the same way to a book of stamps and hence, it's individual stamps as well.

Hence, in view of the teaching of Fite, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a unique identity information data on the book of stamps, so like the pre-paid card, it can be tracked in

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order to verify the correct usage. It is favorable to be able to verify the correct usage of the stamp booklet so that no fraudulent activity is taking place.

5. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as modified by Levasseur, Fite, and Conwell, and further in view of Barcelou (U.S. Patent No. 6,048,271). The teachings of Tuttle/Levasseur/Fite/Conwell have been discussed above.

Regarding claims 18 and 20, Tuttle/Levasseur/Fite/Conwell fails to disclose that an imaging device is used to capture an image of the user of the stamp dispenser.

Barcelou teaches an automated league and tournament device. Barcelou discloses that in FIG. 1, a kiosk 10 is shown in perspective in which two play stations 12 are fitted with play controls 14, a smart card reader/encoder 16, a credit card reader 17, and a video command touchscreen 18. Play controls 14 govern play on a playing field 20 (the playing field itself is shown in greater detail in FIG. 6, below), and scoring is automatically calculated and communicated to a computerized control (not shown) interior to and/or exterior to the kiosk 10. The computerized control connects directly to the smart card reader/encoder 16, the credit card reader 17 and the video command screen 18. On a side of the kiosk 10 generally normal to the two play stations 12, an automated teller machine (ATM) 22 includes typical ATM hardware including a card reader (not shown), keyboard 24, instruction screen 26, bill dispenser 28 and receipt dispenser 30. The playing field 20 is covered by and protected by a penetration resistant dome 32 and a standard ATM/bank security camera 31 (see Figure 1, col 5, lines 25-45).

In view of the teaching of Barcelou, it would have been obvious to one of ordinary skill in the art at the time the invention was made employ an imaging system in order to have a record of who is purchasing and utilizing the vended product. This is favorable for adding security to the system (i.e. the person as well as the product are able to be tracked).

6. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as modified by Levasseur, Fite, and Conwell, and further in view of Porter (U.S. Patent No. 5,774,053). The teachings of Tuttle/Levasseur/Fite/Conwell have been discussed above.

Regarding claims 23-25, Tuttle/Levasseur/Fite/Conwell fails to disclose the confirmation of the delivery articles to the correct mailbox.

Porter teaches a storage device for the delivery and pickup of goods. Porter discloses that all embodiments of the storage device 10 broadly include an enclosure 14 for enclosing delivered goods or goods that are to be picked up and a communication apparatus 16 for controlling access to the enclosure 14 and for providing notification that goods have been delivered to or picked up from the enclosure 14 (see Figures 1-3, col 3, lines 55-60).

In view of the teaching of Porter, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a system to be able to confirm the delivery of the articles with the trackable stamps to ensure that a correct delivery was made (this includes determining if the mailbox location is more than a predefined distance from the dispensing location).

Response to Arguments

7. Applicant's arguments filed in the appeal brief on 20 May 2005, with respect to claims 1 and 3-7, have been fully considered but they are not persuasive.

In response to applicant's arguments that Conwell does not cure the deficiencies of Tuttle, examiner respectfully disagrees and submits that Conwell does indeed cure the deficiencies of Tuttle. Tuttle teaches the use of a stamp with an active RFID device, but within the related art and actual description of the invention discloses that passive RFID devices can indeed be used with the tracking of small objects. In fact, Tuttle discloses alternatives to using a battery in the stamp embodiment (i.e. optical device as recited in col 7). Therefore, Tuttle suggests a modification, and Conwell is the reference that is actually teaching the use of a label with a passive RFID device. It is reiterated that Conwell is indeed relevant since the reference is teaching the use of a label with RFID capabilities, which in turn is applicable to a stamp taught by Tuttle, since stamps are employed as labels. It is appropriate to combine these references because both references teach of RFID systems that are able to track different objects (i.e. stamps/labels). Again, there are well-known advantages and disadvantages to having passive versus active transponders (i.e. passive transponders are smaller (good for a small stamp) and more cost efficient, while active transponders are able to manage more data, while being larger). It is respectfully submitted that both active and passive transponders are well known in the art and usable in these tracking contexts. Furthermore, it is favorable to employ both a passive and an active device on a

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label/stamp because power is guaranteed to be supplied (i.e. if the battery of the active device malfunctions, the passive device is able to be utilized).

In regards to claims 11-20 and 22-28, it is respectfully submitted that the teachings of Tuttle, Conwell, Levasseur, Fite, and Barcelou teach the limitations of the claims as seen in 35 U.S.C. 103 above. Tuttle and Conwell teach the main system of having a passive RFID within a stamp, whereas the references of Levasseur, Fite, Barcelou, and Porter teach the additional limitations of the dependent claims. It is respectfully submitted that these references are able to be combined with Tuttle and Conwell in order to overcome the limitations because they are actually of related fields (i.e. Levasseur teaches the dispensing/vending of stamps, Fite teaches intricacies for vending objects, Barcelou teaches the use of an imaging device for the system, which is well-known in the art to be used with vending systems, and Porter teaches confirmation of a delivery of an object). In response to applicants arguments that Fite teaches that it is only possible to read a magnetic strip on a card, examiner respectfully submits that Fite is not used only for its reading capabilities, but for the fact that it teaches that reading within a proximity (i.e. when the relative position between the stamp and the reader changes) is well known in the art. It is respectfully submitted that the claims as presented, with their limitations recited, are rejected by these references.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ***Lisa M. Caputo*** whose telephone number is **(571) 272-2388**. The examiner can normally be reached between the hours of 8:30AM to 5:00PM Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached at **(571) 272-2398**. The fax phone number for this Group is (703) 872-9306.

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Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [lisa.caputo@uspto.gov].

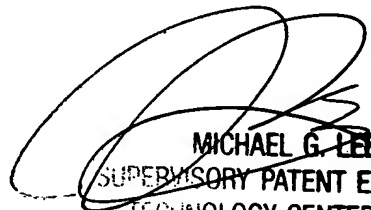
All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LMC

August 16, 2005


MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800